



**A.A. County Potential IMPs - Site 33**

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 1 -- Catchment Information**

Subwatershed: Unnamed Tributary

Location of Catchment Centroid on ADC Map: Year: 2000 Page: 17 Grid: J8

State Plane Coordinates of Outfall Location: X: 1397556 Y: 481684

Closest Road Intersection to Outfall: Priest Bridge Road and Espey Court

Outfall SDI ID or Outfall Description: unknown

Objective: Demonstration / Impairment(s) (Sheet 1) \_\_\_\_\_

Drainage Area (ac): 1.93 Impervious Area (ac): 1.92

Percent Impervious: 99% Soil Recharge Factor (S): 0.38

WQ<sub>v</sub> (required): 0.15 Re<sub>v</sub> (required): 0.06

Predominant Land Use: commercial Mean Depth to Ground Water: unknown

Sanitary System:  Septic  Municipal Sewer Water Supply:  On Site Well  Public Water

**Storm Drainage System Within Catchment**

Piped: 100% Open Channels: 0%

Area Drained by System: 100%

Location in Catchment:  Headwaters  Middle  Lower  All

Open Channel Lining- Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

**Existing IMP(s) / BMP(s)**

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 1 -- Catchment Information (concluded)**

<b>CATCHMENT SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.059</u>	Re <sub>v</sub> (provided) :	<u>0.053</u>
Area Treated (ac):	<u>1.48</u>	Impervious Area Treated (ac):	<u>1.34</u>
Area Treated (%):	<u>77%</u>	Impervious Area Treated (%):	<u>70%</u>

**Comments**

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information**

Site Name: \_\_\_\_\_ Address: 2135 and 2137 Espey Court

Site Owner: \_\_\_\_\_

State Plane Coordinates of Site Centroid: X: 1397552 Y: 481515 Date: 5/27/03

Personnel: PM Weather: cloudy, rain 65F deg

Area (ac): 2.2 Impervious Area (ac): 2

Percent Impervious: 91% Soil Recharge Factor (S): 0.38

WQ<sub>v</sub> (required): 0.16 Re<sub>v</sub> (required): 0.06

Property Area (ac): 3.9 Property Area Included in Site: 57%

Amount of Catchment Occupied by Site: 100%

**Storm Drainage System Within Site**

Piped: 100% Open Channels: 0% Area Drained by System: 100%

Open Channel Lining - Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

**Existing IMP(s) / BMP(s)** (Identified on Page 1, FORM 1, Catchment Information)

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

**Site Information**

Type of Pavement:  Bituminous  Concrete  Gravel  Grid Pavers  Other \_\_\_\_\_

Pavement Condition:  Excellent  Good  Average  Fair  Poor

Underdrains can be easily directed to existing storm drains or daylighted:  YES  NO

Gutter/Exterior Downspouts Present:  YES  NO

Roof Connected Directly to Storm Drain:  YES  NO

Roof Drains onto Impervious Surface:  YES  NO

Obvious Existing Drainage Problems:  Extensive  Moderate  Average  Limited  None

Steep Slopes Present:  Extensive  Moderate  Average  Limited  None

Existing Landscaping:  Extensive  Moderate  Average  Limited  None

Mature / Specimen Trees:  Extensive  Moderate  Average  Limited  None

Area Available for Aboveground BMPs:  Extensive  Moderate  Average  Limited  None

Existing Cover of Potential Aboveground BMP Locations:  Grass  Landscaped  Gravel  Other Pervious  
 Pavement  Other Impervious

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information (concluded)**

**Commercial / Institutional**

Islands Present:  YES  NO

Curb Present Around Island:  YES  NO

Ground Level of Island Relative to Pavement:  Above  Equal  Below

Island Landscaping:  Impervious  Bare Earth  Gravel  Grass  Mulch  Herbaceous Plants  Shrubs  
 Trees (<2 in. DBH)  Trees (2 - 6 in. DBH)  Trees (>6 in. DBH)

Trees have sufficient spacing to allow IMPs  YES  NO

Parking area that can be directed to potential treatment area with little grading: 90%

<b>SITE SUMMARY</b>			
WQ <sub>v</sub> (provided) :	<u>0.059</u>	Re <sub>v</sub> (provided):	<u>0.053</u>
Area Treated (ac) :	<u>1.48</u>	Impervious Area Treated (ac):	<u>1.34</u>
Area Treated (%) :	<u>67%</u>	Impervious Area Treated (%) :	<u>67%</u>

**Photographs**

No. <u>96</u>	Description: <u>looking northeast along north side of 2137 Espey Court</u>
No. <u>97</u>	Description: <u>looking south between 2135 and 2137 Espey Court</u>
No. <u>98</u>	Description: <u>looking north between 2135 and 2137 Espey Court</u>
No. <u>99</u>	Description: <u>looking east along south side of property</u>
No. <u>100</u>	Description: <u>looking north along east side of property</u>
No. <u>101</u>	Description: <u>looking west along south side of property</u>
No. <u>102</u>	Description: <u>looking west along north side of property</u>
No. <u>103</u>	Description: <u>looking south along east side of property</u>
No. _____	Description: _____
No. _____	Description: _____

**Comments** Parking is needed along east side of 2137 and along west side of 2135. East side of 2135 is more commercial and does not appear that customer parking is needed. Most of the parking is for fleet vehicles and employees. However, there does not appear to be surplus parking.

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information (concluded)**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 7

State Plane Coordinates of IMP / BMP Centroid: X: varies Y: varies

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.6 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1397693 Y: 481736

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.05 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.004</u>	Re <sub>v</sub> (provided):	<u>0.002</u>
Area Treated (ac):	<u>0.05</u>	Impervious Area Treated (ac):	<u>0.05</u>

**Photographs**

No. <u>108</u>	Description: <u>looking east</u>
No. <u>109</u>	Description: <u>looking south</u>
No. _____	Description: _____

**Comments** Maximum of 2 parking spots can be affected. Must relocate mailbox. Install "speed bump" to direct flow.  
IMP size = 366 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1397622 Y: 481709

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.09 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.007</u>	Re <sub>v</sub> (provided):	<u>0.003</u>
Area Treated (ac):	<u>0.09</u>	Impervious Area Treated (ac):	<u>0.09</u>

**Photographs**

No. <u>110</u>	Description: <u>looking southwest</u>
No. _____	Description: _____

**Comments** Use maximum of 2 parking spots. Construct "speed bump" to direct flow.  
IMP size = 645 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1397770 Y: 481633

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.2 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.007</u>	Re <sub>v</sub> (provided):	<u>0.007</u>
Area Treated (ac):	<u>0.13</u>	Impervious Area Treated (ac):	<u>0.09</u>

**Photographs**

No. <u>112</u>	Description: <u>looking east</u>
No. <u>113</u>	Description: <u>looking south</u>
No. _____	Description: _____

**Comments** Bioretention area provides 65% treatment as sized.  
IMP size = 645 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1397815 Y: 481507

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.24 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.007</u>	Re <sub>v</sub> (provided):	<u>0.007</u>
Area Treated (ac):	<u>0.12</u>	Impervious Area Treated (ac):	<u>0.09</u>

**Photographs**

No. <u>114</u>	Description: <u>looking south</u>
No. <u>115</u>	Description: <u>looking east</u>
No. _____	Description: _____

**Comments** Bioretention provides 52% treatment of drainage area as sized.  
IMP size = 6542 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1397579 Y: 481608

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.36 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.006</u>	Re <sub>v</sub> (provided):	<u>0.006</u>
Area Treated (ac):	<u>0.14</u>	Impervious Area Treated (ac):	<u>0.07</u>

**Photographs**

No. <u>116</u>	Description: <u>looking south</u>
No. <u>117</u>	Description: <u>looking west</u>
No. _____	Description: _____

**Comments** Bioretention provides 39% treatment of drainage area as sized.  
IMP size = 507 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 60

State Plane Coordinates of IMP / BMP Centroid: X: varies Y: varies

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.35 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.028</u>	Re <sub>v</sub> (provided):	<u>0.028</u>
Area Treated (ac):	<u>0.35</u>	Impervious Area Treated (ac):	<u>0.35</u>

**Photographs**

No. <u>111</u>	Description: <u>looking south along "a"</u>
No. <u>118</u>	Description: <u>looking south along "d"</u>
No. _____	Description: _____

**Comments**      Grid pavers are used to reduce impervious area for the following reasons:

1.) inlet is not adjacent to curb so centralized area cannot be used

2.) to reduce size of IMP

Locations of IMPs:

7a: X=1397751, Y=481687; 7b: X=1397802, Y=481542; 7c: X=1397651, Y=481408; 7d: X=1397664, Y=481523; 7e: X=1397559, 481574; 7f: X=1397834, Y=481454; 7g: X=1397783, Y=481594

IMP/BMP Summary shows combined results for 7a, 7b, 7c, 7d, 7e, 7f and 7g.

IMP size = 15,210 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



111



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